

**To:** Peter Butler[butlerpeter2@gmail.com]  
**Cc:** Schmittiel, Paula[Schmittiel.Paula@epa.gov]; Way, Steven[way.steven@epa.gov]; Lewis, Brent[b1lewis@blm.gov]; Lisa Richardson (lrichard@blm.gov)[lrichard@blm.gov]; Fagen, Elizabeth[Fagen.Elizabeth@epa.gov]  
**From:** Wall, Dan  
**Sent:** Mon 1/26/2015 2:35:31 PM  
**Subject:** RE: Recent Animas data  
Data Validation Charts V4.xlsx

Peter,

I want to share a spreadsheet we have put together looking at historical data as well. You have seen several graphs from this spreadsheet but it is really meant to be interactive so please feel free to share with other interested parties. Maybe this can help with some of your data evaluation.

We spent a significant amount of time trying to QA this data, both concentration and flow, and it is in pretty good shape but in certain situations some judgement was used to modify the data. For instance, if there was a flow listed that didn't make sense, we, where possible relied on a gage reading as opposed to what was in the database.

**From:** Peter Butler [mailto:butlerpeter2@gmail.com]  
**Sent:** Saturday, January 24, 2015 10:11 PM  
**To:** Wall, Dan  
**Subject:** FW: Recent Animas data

Dan – FYI.

**From:** Peter Butler [mailto:butlerpeter2@gmail.com]  
**Sent:** Saturday, January 24, 2015 10:08 PM  
**To:** Bill Simon; Larry Perino  
**Subject:** Recent Animas data

Bill and Larry – I've pulled together all the data I can find since 2011, including the lower Animas to add to our database, except for EPA data. It's all in the ARSG format. Still don't have River Watch data for this past November and December. I will start working on EPA data next.

There still seems to have some high dissolved lead numbers from River Watch. They're reporting limit is 3 ug/l. We'll have to compare them to EPA's data.

One interesting note, Cement Creek metal concentrations appear to have gotten lower. Just eyeballing the numbers, zinc and cadmium have dropped some and copper has fallen more than 50%. It appears that copper peaked around 2007-2008 and has been falling ever since.

Anyway, take a look. I'll do a lot more analysis once I get EPA data pulled together.

Peter Butler

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